

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
10 February 2005 (10.02.2005)

PCT

(10) International Publication Number  
**WO 2005/012533 A3**

(51) International Patent Classification<sup>7</sup>: **C12N 15/81**,  
C12Q 1/68, C12N 1/19

(21) International Application Number:  
PCT/GB2004/003337

(22) International Filing Date: 30 July 2004 (30.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0317944.7 31 July 2003 (31.07.2003) GB  
0317945.4 31 July 2003 (31.07.2003) GB

(71) Applicant (for all designated States except US): **GEN-  
TRONIX LIMITED** [GB/GB]; The Fairbun Building, 72  
Sackville Street, Manchester M60 1QD (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WALMSLEY,  
Richard, Maurice** [GB/GB]; 159 Oswald Road, Chorlton,  
Manchester M21 9AZ (GB). **BILLINTON, Nicholas**  
[GB/GB]; Gentronix Limited, The Fairbun Building, 72  
Sackville Street, Manchester M60 1QD (GB).

(74) Agent: **BANFORD, Paul, Clifford**; Marks & Clerk, 43  
Park Place, Leeds LS1 2RY (GB).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

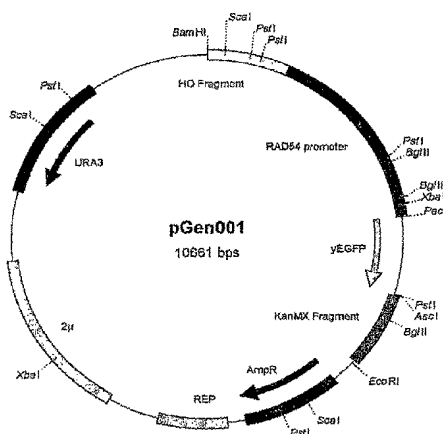
**Published:**

— with international search report  
— before the expiration of the time limit for amending the  
claims and to be republished in the event of receipt of  
amendments

(88) Date of publication of the international search report:  
31 March 2005

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: GENOTOXICITY TESTING



(57) Abstract: A recombinant vector comprises a recombinant DNA molecule comprising a DNA sequence that encodes a light emitting reporter protein. The DNA sequence is operatively linked to a regulatory element arranged to activate expression of the DNA sequence in response to DNA damage. When used to transform a cell, the vector does not substantially alter the sensitivity of the cell to geneticin, when compared to the sensitivity of the cell which has not been transformed with the vector.

WO 2005/012533 A3